



Our ref: KON-1837

Client's ref: P-6278-001-0000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Application of: S. OKANO et al. : Art Unit: 1752

Serial No. : 10/725,310

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Examiner: H. V.

Filed : December 1, 2003

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Title : CONCENTRATED BLEACH-FIXER:  
COMPOSITION FOR SILVER  
HALIDE COLOR PHOTOGRAPHIC:  
MATERIAL

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**DECLARATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

S i r:

I, Satoshi Okano, hereby declare and say as follows:

1. I am one of the Inventors of the above-identified Application.

2. I received a Master's degree in engineering from the University of Electro-Communications in 1999. Since that time, I have been employed by Konica Corporation (now Konica Minolta Photo Imaging, Inc.), the Assignee of the above-identified Application. During my employment at Konica, I have engaged in research and development in the field of photographic materials.
3. I am aware that the Examiner has rejected the above-identified Application based on Kuykendall (US 6,534,253) and Kamada (US 5,534,395). Tests have been performed and are reported herein to demonstrate the synergistic properties of the composition claimed in the above-identified Application compared to the teachings of Kuykendall and Kamada. These tests have been performed either by myself or under my direct supervision and control.
4. Bleach-fixing solutions 101-120 shown in the attached Table 10 were prepared based on Table V at col. 16 in Example 1 of Kuykendall. The Fe(II) ratios of solutions 101-120 shown in Table 10 were obtained by varying the time of air oxidation which converted the ferrous ions to ferric ions.

Imidazole compounds were added in the amounts shown in Table 10 to produce bleach-fixing solutions 101-120.

5. Bleach-fixing solutions 101-120 were stored in container (b) described at page 64 of the above-identified Application. Bleach-fixing solutions 101-120 were then evaluated for background whiteness and stain in accordance with Example 1 of the above-identified Application. The results of the evaluations are illustrated in the attached Table 10.
6. Comparative solutions 101, 102, 107, 108, 113 and 114 containing an imidazole compound exhibited a small improvement in whiteness and stain compared to Comparative solutions 119 and 120 (improvement of about 10%). Comparative solutions 101, 102, 107, 108, 113 and 114 therefore demonstrate that one of skill in the art would expect about a 10% improvement in whiteness and stain when adding the imidazole compound to a bleach-fixing composition.

7. However, Table 10 also demonstrates that Inventive solutions 103-106, 108-112 and 115-118 exhibited greater improved whiteness and stain compared to the 10% improvement expected by one of skill in the art. For example, Inventive solutions 103-106, 108-112 and 115-118 exhibited about a 60-90% improvement in whiteness and stain compared to Comparative solutions 119 and 120. This 60-90% improvement is much greater than the 10% improvement expected by one of skill in the art.

8. I believe that Table 10 demonstrates the synergistic combination of the claimed invention, namely, the synergistic combination of the claimed Fe(II) ratio and the imidazole compound, compared to the teachings of Kuykendall and Kamada. Table 10 demonstrates that Inventive solutions 103-106, 108-112 and 115-118 satisfying the claimed Fe(II) ratio and containing an imidazole compound exhibited improvements in whiteness and stain of about 60-90% compared to Comparative solutions 119 and 120 satisfying the claimed Fe(II) ratio but not containing an imidazole compound. In contrast, Comparative solutions 101, 102, 107, 108, 113 and 114 containing an imidazole compound but not satisfying the claimed Fe(II) ratio exhibited an



improvement of only about 10% compared to Comparative solutions 119 and 120.

9. I believe that the synergistic combination of the claimed Fe(II) ratio and the imidazole compound illustrated in Table 10 is both surprising and unexpected based on the teachings of Kuykendall and Kamada.

It is declared by undersigned that all statements made herein of undersigned's own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the U.S. Code; and that such willful false statements may jeopardize the validity of this Application or any patent issuing thereon.

Satoshi Okano  
Satoshi Okano

Dated: This 14<sup>th</sup> day of July, 2005.

Encl: Table 10



Table 10

Expt. No.	Fe(II) Ratio (mol%)	Additive (mol%)	Photographic Quality		Re-mark
			Whiteness	Stain	
101	40	imidazole (0.2)	0.09	0.1	Comp.
102	40	imidazole (0.43)	0.08	0.1	Comp.
103	50	imidazole (0.2)	0.03	0.04	Inv.
104	50	imidazole (0.43)	0.01	0.04	Inv.
105	80	imidazole (0.2)	0.01	0.02	Inv.
106	80	imidazole (0.43)	0.03	0.01	Inv.
107	40	1-methylimidazole (0.2)	0.09	0.1	Comp.
108	40	1-methylimidazole (0.43)	0.08	0.1	Comp.
109	50	1-methylimidazole (0.2)	0.04	0.04	Inv.
110	50	1-methylimidazole (0.43)	0.03	0.04	Inv.
111	80	1-methylimidazole (0.2)	0.02	0.02	Inv.
112	80	1-methylimidazole (0.43)	0.01	0.02	Inv.
113	40	2-methylimidazole (0.2)	0.09	0.1	Comp.
114	40	2-methylimidazole (0.43)	0.09	0.1	Comp.
115	50	2-methylimidazole (0.2)	0.04	0.04	Inv.
116	50	2-methylimidazole (0.43)	0.04	0.04	Inv.
117	80	2-methylimidazole (0.2)	0.02	0.02	Inv.
118	80	2-methylimidazole (0.43)	0.02	0.02	Inv.
119	50	-	0.1	0.11	Comp.
120	80	-	0.09	0.11	Comp.